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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,261	09/28/2000	YUTAKA TAKEUCHI	106375	8216

25944 7590 02/18/2004

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EXAMINER	
DI GRAZIO, JEANNE A	
ART UNIT	**PAPER NUMBER**
2871	

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

K.D

Office Action Summary	Application No.	Applicant(s)	
	09/671,261	TAKEUCHI, YUTAKA	
	Examiner	Art Unit	
	Jeanne A. Di Grazio	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Priority to Japanese Patent Application No. 11-275250 (Sept. 28, 1999) is claimed.

Application History

Claims 1-6 are pending in this application per Applicant's Amendment of November 18, 2003.

Drawings

Applicant has submitted drawing corrections to Figures 17 and 18 to reflect prior / related art.

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (APA) Figure 17 in view of Kobayashi US 5,986,739.

Per claims 1-3 and 5-6: Applicant's Figure 17 discloses a part of an electrode width of an electrode strip in an unformed region of a protective layer being equal to an electrode width of an electrode strip on the protective layer within an effective region (DESCRIPTION OF RELATED

ART, page 1, lines 10-32 and page 2, lines 1-32). In Figure 17, it may be implied that a pair of sides of an electrode strip align with each other as recited in claim 3.

APA (Figure 17) does not appear to have a plurality of electrode strips arranged on the protective layer and extending from a formation region of the protective layer to an unformed region of the protective layer, an electrode width of an electrode strip on a step portion forming an outline of the protective layer in the boundary part of the formation region and the unformed region being set to be narrower than an electrode width of an electrode strip on the protective layer in the formation region (by approximately 4μm), an electrode width of an electrode strip in the unformed region being set to be wider than the electrode width of the electrode strip on the step portion.

Kobayashi teaches and discloses a liquid crystal panel substrate, fabrication method, liquid crystal device, and electronic apparatus (Title, entire patent). Kobayashi teaches an improvement in the shape of electrodes for the purpose of testing for shorts and breaks (Summary of the Invention, Column 3, Lines 10-13). Kobayashi features each electrode having a width that differs between a display region versus a non-display region (Abstract, entire patent). The shape of the electrodes is optimized for the purpose of testing for shorts and breaks. Kobayashi also teaches that there has been an increasing demand for narrow inter-electrode gaps (Column 3, Lines 2-6).

Kobayashi is evidence that ordinary workers in the field of liquid crystals would have had the reason, suggestion, and motivation to optimize electrode shape and to make electrodes of varying widths between liquid crystal display regions for the purpose of being able to test for shorts and breaks and for accurate testing of electrodes (Column 3, Lines 29-41).

Optimization of electrode shape is a results effective variable. Optimization of a results effective variable requires only routine skill in the art (MPEP 2144.05 II).

Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify APA in view of Kobayashi to optimize electrode shape and to make electrodes of varying widths between liquid crystal display regions for the purpose of being able to test for shorts and breaks and for accurate testing of electrodes (Column 3, Lines 29-41).

Per claim 4: Kobayashi, Figure 8, illustrates an electronic device that incorporates the electrical circuit having the differing electrode widths. It would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to incorporate the electrical circuit as claimed in claim 1 into an electronic device where one could easily and efficiently test for breaks and shorts and thereby ensure an excellent display quality.

Per claim 5: APA (Figure 17) does not appear to explicitly specify a gap between electrode strips adjacent to each other on the step portion is larger than that of electrode strips adjacent to each other on the formation region, electrode strips adjacent to each other on the unformed region being provided with part of a gap which is equal to the gap between the electrode strips on the formation region.

Kobayashi teaches and discloses a liquid crystal panel substrate, fabrication method, liquid crystal device, and electronic apparatus (Title, entire patent). Kobayashi teaches an improvement in the shape of electrodes for the purpose of testing for shorts and breaks (Summary of the Invention, Column 3, Lines 10-13). Kobayashi features each electrode having a

width that differs between a display region versus a non-display region (Abstract, entire patent). The shape of the electrodes is optimized for the purpose of testing for shorts and breaks.

Kobayashi is evidence that ordinary workers in the field of liquid crystals would have had the reason, suggestion, and motivation to optimize electrode shape and to make electrodes of varying widths between liquid crystal display regions for the purpose of being able to test for shorts and breaks and for accurate testing of electrodes (Column 3, Lines 29-41).

Optimization of electrode shape is a results effective variable. Optimization of a results effective variable requires only routine skill in the art (MPEP 2144.05 II).

Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify APA in view of Kobayashi to optimize electrode shape and to make electrodes of varying widths between liquid crystal display regions for the purpose of being able to test for shorts and breaks and for accurate testing of electrodes (Column 3, Lines 29-41).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (571)272-2289. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached on (571)272-2293. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-8741 for regular communications and (703)746-8741 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Jeanne Andrea Di Grazio

Robert Kim, SPE

JDG
February 9, 2004

ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800